Vermont Mental Health Performance Indicator Project

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MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project Advisory Group and Interested Parties

FROM: John Pandiani and Christine Van Vleck

DATE: November 14, 2003

RE: AHS Caseload Overlap

This week's PIP examines caseload overlap among Agency of Human Services (AHS) direct service programs during FY 2002. This analysis is part of the second AHS Unduplicated Client Count Project being conducted by the Vermont Mental Health Performance Indicator Project. These findings are relevant to Performance Indicator Project concerns regarding access to care and service system integration, as well as the need for service coordination across AHS departments.

Data for this analysis were provided to the AHS Unduplicated Client Count Project by AHS departments and programs. The attached tables include a detailed listing of AHS departments and programs included in this analysis. Because these data sets do not share unique person identifiers, Probabilistic Population Estimation was used to determine unduplicated client counts within and across programs.

As you will see, only 18% of all AHS direct service clients were served by more than one AHS department during FY 2002, 82% of all AHS direct service clients received services from only one AHS department during the year. Among AHS departments, ADAP (Alcohol and Drug Abuse) had the highest rate of caseload overlap with other AHS departments (60%) followed by SRS (Social and Rehabilitation Services) and Mental Health (44% and 40%, respectively). DAD (Department of Aging and Disabilities) had the lowest rate of caseload overlap with other departments (21%). The proportion of AHS children with multiple department involvement (22%) is somewhat larger than the proportions of adult men and adult women with multiple program involvement (17% each), although differences between men and women within some programs are substantially higher.

These findings indicate that individuals on the DAD caseload have the lowest rate of participation in other AHS programs, while individuals on the caseload of ADAP, SRS, and Mental Health programs have the highest rate of participation in other AHS direct service programs. If participation in multiple-department programs is considered an indication of need for service coordination, individuals served by ADAP, SRS, and Mental Health have the greatest need for such services while individuals served by DAD have the least need in this area. If service system integration is considered to be of value, departments with low participation in other AHS programs might consider the appropriateness of referring clients to other relevant programs. Further analysis that focuses on the specific combinations of programs for which

there is evidence of service system integration/segregation could be helpful in addressing both of these areas of concern.

We believe that the counterintuitive results of this analysis underline the importance of objective analysis of quantitative data as a supplement to subjective impressions in human services planning and administration. We look forward to your interpretations of these findings and your suggestions for further analysis. As always, you can reach us at pip@ddmhs.state.vt.us or 802-241-2638.

METHODOLOGICAL APPENDIX

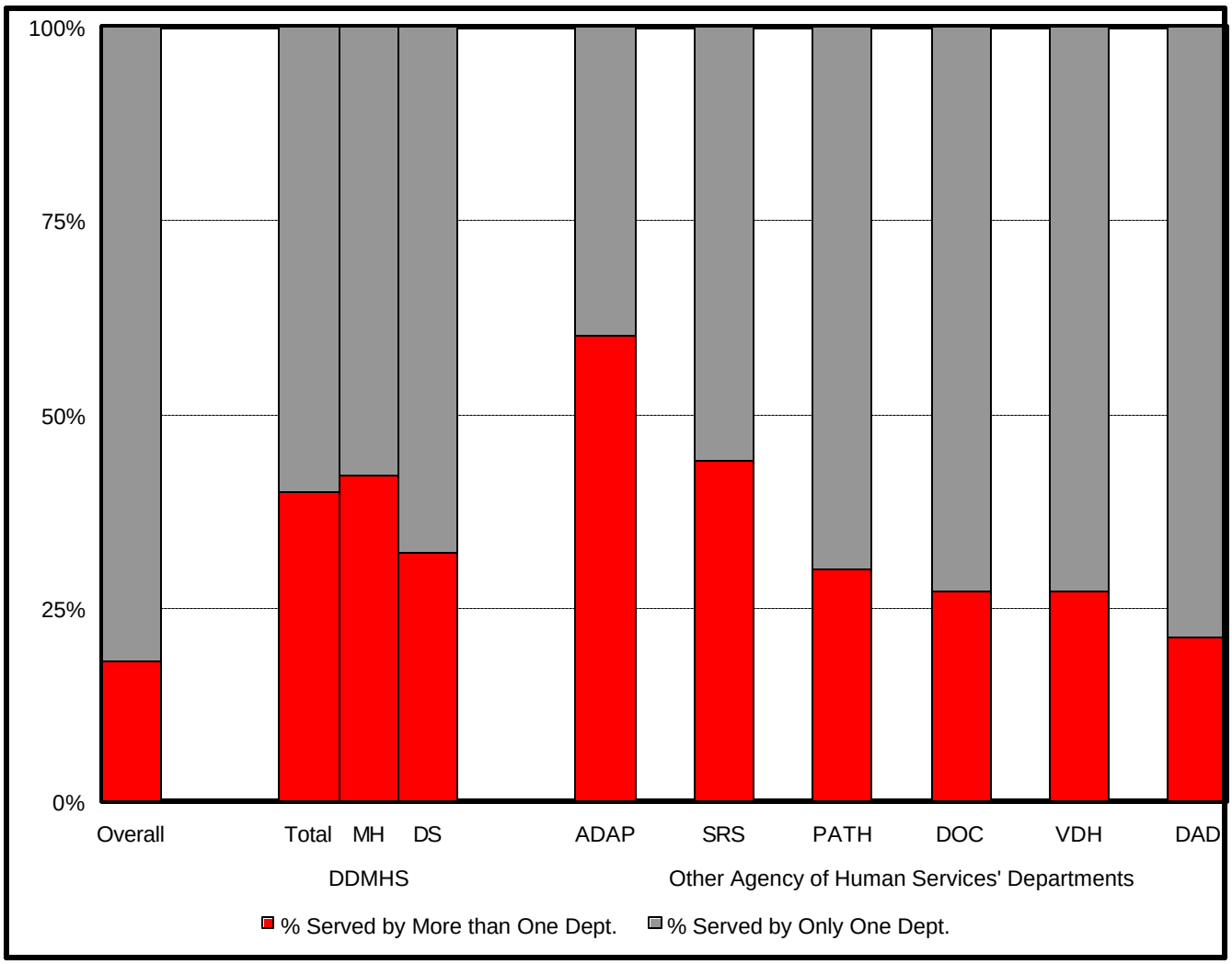
It is interesting to note that the proportion of all AHS clients who appear on the caseload of more than one AHS department is substantially lower than the proportion for any individual AHS department. The rate of multiple department participation for AHS as a whole is smaller than for any of the parts. The reasons for this seeming anomaly can be understood on both the conceptual and the computational level.

On the conceptual level, this anomaly is related to the fact that all individuals who appear on the caseload of more than one department are multiple-department clients in every department in which they are served. Every individual who appears on the caseload of multiple departments is counted as a multiple program client multiple times. In the unduplicated count at the state level, those individuals who are reported as multiple program clients are only counted once.

Computationally, the number of people on the caseload of each department who are served by that department only is established by calculating the overlap between a data set that includes all individuals served by that specific department and another data set that includes all individuals served by any other department. Because the data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to determine the size of three populations: the unduplicated number of people served in the department under examination, the unduplicated number of people in the data set that includes all individuals on the caseload of other AHS departments, and the unduplicated number of people who appeared in both data sets. The number of people served by only the department under examination is the difference between the unduplicated number served by the department and the number that were also served by another department (the caseload overlap).

The computation at the AHS level is somewhat different. As in the program level analysis, Probabilistic Population Estimation was used to determine the unduplicated number of individuals served by AHS within the year. The number of individuals served by more than one department was then determined by subtracting the total number of individuals served by only one AHS department from the total number served by AHS. The total number of individuals served by only one AHS department was determined by summing the numbers of individuals that were only served by one of the individual AHS departments. This addition is appropriate because these populations are, by definition, mutually exclusive; the addition includes no duplication.

Direct Service Caseload Overlap
by AHS Department FY 2002



Total "direct service" caseload includes an unduplicated number of all Vermont residents served by the AHS direct service programs.

DDMHS (The Department of Developmental and Mental Health Services) includes designated community agencies and the Vermont State Hospital.

ADAP (Alcohol and Drug Abuse Programs) includes all ADAP funded programs.

SRS (Social and Rehabilitation Services) includes Adoption Subsidy, Custody Clients, Delinquents on Probation, Parents of Child Abuse/Neglect Victims and non-custody victims, and Intensive Family Based Services.

PATH (The Department of Prevention, Assistance, Transition, and Health Access) includes Reach Up.

DOC (Department of Corrections) includes both incarcerated and in the field populations.

VDH (Vermont Department of Health) includes Healthy Baby Program, 1 to 5 Program, Refugee Program, Children with Special Health Needs, and Ladies First Program.

DAD (Department of Aging and Disabilities) includes Independent Living Program, Vocational Rehabilitation Program for Customers and for Consumers, TBI Waiver Program, Area of Agencies on Aging, Public Guardian Program, Medicaid Waiver clients, and Attendant Service Program.

Because the data sets used in this analysis do not share unique person identifiers, Probabilistic Population Estimation was used to measure caseload size and overlap (with 95% confidence intervals).

Direct Service Caseload Overlap
Overall
By AHS Department FY 2002

Department	Direct Service Caseload Number	Served by more than one Direct Service Department		Served by only one Direct Service Department	
		Number	Percent	Number	Percent
Total Direct Service Caseload	92,784 ± 191	16,932 ± 329	18% ± 0.4%	75,852 ± 269	82% ± 0.3%
DDMHS	22,332 ± 52	8,906 ± 106	40% ± 0.5%	13,426 ± 118	60% ± 0.5%
MH	20,011 ± 48	8,321 ± 99	42% ± 0.5%	11,690 ± 110	58% ± 0.6%
DS	2,366 ± 7	747 ± 30	32% ± 1.3%	1,619 ± 31	68% ± 1.3%
ADAP	7,103 ± 27	4,271 ± 60	60% ± 0.9%	2,832 ± 66	40% ± 0.9%
SRS	9,565 ± 28	4,234 ± 70	44% ± 0.7%	5,331 ± 76	56% ± 0.8%
PATH	23,787 + 68	7,212 + 114	30% + 0.5%	16,575 + 133	70% + 0.6%
DOC	21,059 ± 80	5,729 ± 114	27% ± 0.5%	15,330 ± 139	73% ± 0.7%
VDH	9,753 ± 33	2,664 ± 66	27% ± 0.7%	7,090 ± 74	73% ± 0.8%
DAD	19,378 ± 44	4,108 ± 62	21% ± 0.3%	15,270 ± 76	79% ± 0.4%

Total "direct service" caseload includes an unduplicated number of all Vermont residents served by the AHS direct service programs.

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Direct Service Caseload Overlap
Children
By AHS Department FY 2002

Department	Direct Service Caseload Number	Served by more than one Direct Service Department Number	Served by more than one Direct Service Department Percent	Served by only one Direct Service Department Number	Served by only one Direct Service Department Percent
Total Direct Service Caseload	27,498 ± 110	5,971 ± 195	22% ± 0.7%	21,526 ± 161	78% ± 0.7%
DDMHS	8,645 ± 40	3,877 ± 71	45% ± 0.8%	4,768 ± 82	55% ± 1.0%
MH	8,190 ± 38	3,709 ± 68	45% ± 0.9%	4,481 ± 78	55% ± 1.0%
DS	475 ± 3	215 ± 15	45% ± 3.1%	260 ± 15	55% ± 3.2%
ADAP	1,243 ± 14	716 ± 29	58% ± 2.4%	527 ± 32	42% ± 2.6%
SRS	5,166 ± 24	2,654 ± 53	51% ± 1.1%	2,512 ± 58	49% ± 1.1%
PATH	14,524 + 59	3,772 + 88	26% + 0.6%	10,752 + 105	74% + 0.8%
DOC	567 ± 11	299 ± 21	53% ± 3.9%	268 ± 24	47% ± 4.3%
VDH	4,112 ± 26	1,563 ± 48	38% ± 1.2%	2,549 ± 55	62% ± 1.4%
DAD	339 ± 5	188 ± 14	56% ± 4.2%	151 ± 15	44% ± 4.4%

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Analysis Performed by the Vermont Mental Health Performance Indicator Project

Direct Service Caseload Overlap
Adult Women
By AHS Department FY 2002

Department	Direct Service Caseload Number	Served by more than one Direct Service Department		Served by only one Direct Service Department	
		Number	Percent	Number	Percent
Total Direct Service Caseload	33,454 ± 99	5,601 ± 170	17% ± 0.5%	27,853 ± 138	83% ± 0.5%
DDMHS	7,736 ± 25	2,868 ± 57	37% ± 0.7%	4,868 ± 62	63% ± 0.8%
MH	6,904 ± 23	2,686 ± 53	39% ± 0.8%	4,219 ± 57	61% ± 0.9%
DS	843 ± 4	244 ± 15	29% ± 1.8%	600 ± 16	71% ± 1.9%
ADAP	1,849 ± 11	1,097 ± 28	59% ± 1.5%	752 ± 30	41% ± 1.6%
SRS	2,375 ± 11	927 ± 31	39% ± 1.3%	1,448 ± 33	61% ± 1.4%
PATH	6,986 + 33	2,526 + 64	36% + 0.9%	4,460 + 72	64% + 1.1%
DOC	3,914 ± 20	1,675 ± 46	43% ± 1.2%	2,240 ± 51	57% ± 1.3%
VDH	5,564 ± 21	1,073 ± 45	19% ± 0.8%	4,491 ± 49	81% ± 0.9%
DAD	11,872 ± 37	2,279 ± 42	19% ± 0.4%	9,594 ± 56	81% ± 0.5%

Total "direct service" caseload includes an unduplicated number of all Vermont residents served by the AHS direct service programs.
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Direct Service Caseload Overlap
Adult Men
By AHS Department FY 2002

Department	Direct Service Caseload Number	Served by more than one Direct Service Department: Number	Served by more than one Direct Service Department: Percent	Served by only one Direct Service Department: Number	Served by only one Direct Service Department: Percent
Total Direct Service Caseload	31,833 ± 120	5,360 ± 204	17% ± 0.6%	26,473 ± 165	83% ± 0.6%
DDMHS	5,951 ± 21	2,162 ± 55	36% ± 0.9%	3,790 ± 59	64% ± 1.0%
MH	4,916 ± 18	1,926 ± 48	39% ± 1.0%	2,990 ± 52	61% ± 1.1%
DS	1,048 ± 5	289 ± 22	28% ± 2.1%	759 ± 22	72% ± 2.1%
ADAP	4,011 ± 20	2,458 ± 45	61% ± 1.2%	1,553 ± 49	39% ± 1.2%
SRS	2,024 ± 10	653 ± 34	32% ± 1.7%	1,371 ± 35	68% ± 1.8%
PATH	2,276 + 10	914 + 36	40% + 1.6%	1,363 + 37	60% + 1.7%
DOC	16,578 ± 77	3,755 ± 101	23% ± 0.6%	12,822 ± 127	77% ± 0.8%
VDH	77 ± 1	28 ± 7	36% ± 9.1%	49 ± 7	64% ± 9.3%
DAD	7,166 ± 22	1,641 ± 43	23% ± 0.6%	5,525 ± 48	77% ± 0.7%

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